This Submission is presented prior to the filing of an Appeal Brief. Furthermore, the earliest effective filing date of this application is before June 8, 1993, as required under 37 CFR 1.129(a). The fee under 37 CFR 1.17(r) accompanies this Submission, as well as a Petition and fee for an extension of time.

Reconsideration of the application is respectfully requested in view of the following amendments and remarks.

Accompanying Documents

Accompanying this response are the following documents:

(1) Declaration of Lawrence Scott Cousens, Ph.D.; and

(2) Copy of the currently pending claims, incorporating the amendments made herein.

Amendment

In the Claims:

Please amend claims 25-27 as follows:

25. (Four times amended) A recombinant protein preparation comprising a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-193, inclusive, of Figure 1, or an analog of said sequence that [is substantially homologous and functionally equivalent thereto] comprises less than 10 amino acid variations and retains PDGF biological activity as measured using a human foreskin fibroblast mitogen assay, wherein said protein preparation is produced in a nonhuman cell such that said protein preparation is free of other human proteins.

26. (Three times amended) A recombinant protein preparation comprising a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising (a) the amino acid sequence numbered 87-196, inclusive, of Figure 1, (b) the amino acid sequence numbered 87 to 196, inclusive, of figure 2 or (c) an analog of (a) or (b) that [is substantially homologous and functionally equivalent thereto] comprises less than 10 amino acid variations and retains PDGF biological activity as measured using a human foreskin fibroblast mitogen assay, wherein said protein preparation is produced in a nonhuman cell such that said protein preparation is free of other human proteins.

27. (Three times amended) A recombinant protein preparation comprising a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-211, inclusive, of Figure 1, or an analog of said sequence that [is substantially homologous and functionally equivalent thereto] comprises less than 10 amino acid variations and retains PDGF biological activity as measured using a human foreskin fibroblast mitogen assay, wherein said protein preparation is produced in a nonhuman cell such that said protein preparation is free of other human proteins.

Please add the following new claims:

--58. (New) The recombinant protein preparation of claim 25, wherein the preparation comprises a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-193, inclusive, of Figure 1.

59. (New) The recombinant protein preparation of claim 26, wherein the preparation comprises a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-196, inclusive, of Figure 1 or the amino acid sequence numbered 87-196, inclusive, of Figure 2.

60. (New) The recombinant protein preparation of claim 27, wherein the preparation comprises a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-211, inclusive, of Figure 1.

61. (New) The recombinant protein preparation of claim 26, wherein the analog comprises less than 10 amino acid substitutions.

62. (New) The recombinant protein preparation of claim 27, wherein the analog comprises less than 10 amino acid substitutions.

63. (New) The recombinant protein preparation of claim 28, wherein the analog comprises less than 10 amino acid substitutions.

64. (New) The recombinant protein preparation of claim 61, wherein the analog comprises less than 3 amino acid substitutions.

65. (New) The recombinant protein preparation of claim 62, wherein the analog comprises less than 3 amino acid substitutions.

Currently Pending Claims (08/453,350)

25. (Four times amended) A recombinant protein preparation comprising a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-193, inclusive, of Figure 1, or an analog of said sequence that comprises less than 10 amino acid variations and retains PDGF biological activity as measured using a human foreskin fibroblast mitogen assay, wherein said protein preparation is produced in a nonhuman cell such that said protein preparation is free of other human proteins.

26. (Three times amended) A recombinant protein preparation comprising a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising (a) the amino acid sequence numbered 87-196, inclusive, of Figure 1, (b) the amino acid sequence numbered 87 to 196, inclusive, of figure 2 or (c) an analog of (a) or (b) that comprises less than 10 amino acid variations and retains PDGF biological activity as measured using a human foreskin fibroblast mitogen assay, wherein said protein preparation is produced in a nonhuman cell such that said protein preparation is free of other human proteins.

27. (Three times amended) A recombinant protein preparation comprising a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-211, inclusive, of Figure 1, or an analog of said sequence that comprises less than 10 amino acid variations and retains PDGF biological activity as measured using a human foreskin fibroblast mitogen assay, wherein said protein preparation is produced in a nonhuman cell such that said protein preparation is free of other human proteins.

43. The protein preparation of claim 25, further comprising a pharmaceutically acceptable excipient.

44. The protein preparation of claim 26, further comprising a pharmaceutically acceptable excipient.

45. The protein preparation of claim 27, further comprising a pharmaceutically acceptable excipient.

55. The protein preparation of claim 43, wherein the pharmaceutically acceptable excipient is suitable for topical administration.

56. The protein preparation of claim 44, wherein the pharmaceutically acceptable excipient is suitable for topical administration.

57. The protein preparation of claim 44, wherein the pharmaceutically acceptable excipient is suitable for topical administration.

58. (New) The recombinant protein preparation of claim 25, wherein the preparation comprises a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-193, inclusive, of Figure 1.

59. (New) The recombinant protein preparation of claim 26, wherein the preparation comprises a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-196, inclusive, of Figure 1 or the amino acid sequence numbered 87-196, inclusive, of Figure 2.

60. (New) The recombinant protein preparation of claim 27, wherein the preparation comprises a PDGF A-chain homodimer comprised of two disulfide linked chains, each of said chains comprising the amino acid sequence numbered 87-211, inclusive, of Figure 1.

61. (New) The recombinant protein preparation of claim 26, wherein the analog comprises less than 10 amino acid substitutions.

62. (New) The recombinant protein preparation of claim 27, wherein the analog comprises less than 10 amino acid substitutions.

63. (New) The recombinant protein preparation of claim 28, wherein the analog comprises less than 10 amino acid substitutions.

64. (New) The recombinant protein preparation of claim 61, wherein the analog comprises less than 3 amino acid substitutions.

65. (New) The recombinant protein preparation of claim 62, wherein the analog comprises less than 3 amino acid substitutions.

66. (New) The recombinant protein preparation of claim 63, wherein the analog comprises less than 3 amino acid substitutions.